670.5 v.16

IN TWO SECTIONS—SECTION TWO

Index to Volume Sixteen of The Paper Industry

April, 1934—March, 1935

Page numbers in this index are preceded by numbers of the issues. April, 1934, is No. 1 and March, 1935, is No. 12

A

Absorption of liquids by pulps....12, 879
Accident experience exchange.... 7, 500
Accident prevention and the new industrial economy 7, 499
Acetyl and methoxyl content of spruce.... 8, 587
Acid numbers of pulps.... 8, 585
Acid pulping developments....12, 852
Adams, F. W., and G. S. Witham, Jr., Scientific control as an aid to the art of papermaking 4, 269
Admission of stock to the fourdrinier wire....12, 856
Adverse function of gases in the manufacture of paper 12, 861
Aiding combustion control.... 5, 347
Air control for oil burning boilers.... 7, 507
Air permeability, precise measurement of....10, 693
Alfol roofing in paper industry.... 1, 59
Alkali concentration in sulphate pulpmaking... 4, 285
Alkaline pulping processes, studies on.... 6, 413
Analyzing sulphite mill problems....12, 853
Andersen, L. C., and H. B. McAdam, Extension of high speed grinding studies....11, 768
Anderson, O. E., Analyzing sulphite mill problems 12, 853
Annis, H. M., Testing and classification of coated paper 12, 851
Application of vacuum pumps to paper machines, the 4, 261
Apprenticeship in the paper industry and the NRA 12, 851
Aronovsky, S. I., Studies on the alkaline pulping processes 6, 413
Association Meetings:
Affiliated groups draw large attendance...12, 864
Confidence expressed at annual meeting of A.P.&P.A. 12, 848
National Safety Council holds twenty-third annual meeting 7, 499
Ohio T.A.P.P.I. at Middletown.... 9, 641
Pacific T.A.P.P.I. is host to parent association 7, 484
Salesmen's association bears stirring addresses 12, 866
Summer meeting of Canadian technical association 5, 339
Superintendents hold profitable annual meeting 4, 264
Technical association holds twentieth annual meeting 12, 850
Twenty-second meeting of Canadian Technical Section 11, 767
Art of bleaching in theory and in practice, the 4, 266
Atkinson, Kerr, Practical limits for steam pressure and temperature in paper mill power plant service 12, 858
Augustus, Ernest, Accident experience exchange 7, 500

B

Bacon, R H., Combustion control equipment...11, 771
Bag machines, photo-electric control of.... 8, 568
Bailey, A. J., Lignin in Douglas fir.... 7, 480
Baird, P. K., and F. A. Simmonds, Procedure for investigating the relation of freeness and fiber size to the hydration of stuffs.....12, 861
Baker, R R., Motorized wet-end drive..... 4, 258
Some economic considerations in the selection of paper mill drives.... 4, 270
Banta, H. D., The Yankee machine.... 8, 566
Barking by steam.... 1, 59
Bearce, G. D., The influence of the head box and slice on sheet formation....12, 856
Bearing fundamentals 12, 835
Beater 1, 57; 5, 355
Beater control 12, 861
Beating from standpoints of control and design.12, 861
Bellows, John, What is technical control and does it pay?.... 3, 173
Bennett process, physico-chemical principles of.12, 855
Bentzen, Th., Dr., Technology of photographic basepaper production 5, 336
Berger, O. L., Steam used for sulphite pulping.12, 853
Bewold process, fundamentals of....12, 855
Bird, A. C., Operating practice in switching and power distribution in paper mills....12, 858
Bissell, D. H., Chromium plating in the pulp and paper industry.... 3, 174
Black Clawson vat.... 4, 268
Blaisdell, Charles A., and Jessie E. Minor, Relation of white water pH to that of finished paper 6, 401
Bleaching of cellulose.... 8, 587
Bleaching of cellulose fibers.... 3, 203
Bleaching of partially dried pulp....10, 719
Bleaching pulp of low stock density....10, 719
Board, size testing of.... 1, 31
Boiler feed lines.... 9, 644
Boiler operation, trouble-free.... 2, 122
Boiler plant operation, rules for.... 6, 425
Boiler water treatment.... 9, 649
Boilers and accessories, tests of....11, 785
Booth, L. M., Paper machine water....12, 856
Boron in wrapping paper.... 8, 589
Braille paper white, study of.... 6, 406
Brass electrical parts, to clean.... 2, 122
Brennan, Walter J., Let's teach safety's teachers 7, 500
Brown, H. E., Requirements of materials for wearing fourdrinier wires....12, 854
Browning, B. L., and Otto Kress, A study of some factors influencing the formation and dissociation of sulphur trioxide in sulphur burner gases for sulphite pulping....12, 853
Brush pressure should not be excessive.... 1, 45
Brush reliability 12, 877
Building company spirit for company success..10, 690
Bulske, M. E., An insurance engineer reviews paper mill fire hazards.... 1, 34
Butler, Smedley, Guest speaker at superintendent's banquest.... 4, 271

C

Calculating the length of paper in a roll..... 1, 29
Calkin, J. B., Certified stains for fiber differentation 12, 854
Cameron, G. M., and D. K. Dean, Steam Accumulators in paper mills....12, 858
Cameron, W. H., Industry and Accidents in 1934 ....10, 705
Campbell, Boyd, Fibre structure and its influence in papermaking 11, 769
Cannon, H. P., and B. M. Thomas, Production planning 5, 323
Carson, F. T., Maintenance, calibration and use of paper testing instruments.... 9, 621
Casein 4, 245
Cause and effect of improper drying on paper machines 2, 112
Caustic soda and soda ash.... 4, 252
Cell wall of wood fibers, structure of.... 3, 178
Cellulose ether and ester sheets.... 1, 59
Centrifiner 4, 285
Certified stains for fiber differentiation.....12, 854
Chart for executive control during time of shifting economy....12, 850
Chemical stages in wood growth.... 4, 289
Chemicals for papermaking (symposium)..... 4, 243
Chemistry of color....12, 858
Chest outlets and overflows.... 3, 177
China clay 4, 247; 6; 433
Chlorine-gas and liquid.... 4, 246
Chromium alloys in chemical plants.... 4, 289
Chromium plating in the pulp and paper industry 3, 174
Circulation of gases and liquor in digesters....11, 791
Clark, F. C., Paper industry standardization of product and its relationship to the superintendent 4, 269
Clark, James d'A., The Kollergang beating method for pulp evaluation....12, 851
Determination of rigidity, stiffness and softness of paper, the....12, 854
Clean steam pays dividends.... 4, 279
Cleaning surfaces, systematic cleaning..... 2, 122
Close-up of some salesmen as seen by a paper mill purchasing agent, a.... 2, 101
Clutches, design and use of in the paper industry 8, 562
Coating brushes . . . their care and maintenance 9, 627
Cole, Graham A., Putting safety engineers under the microscope.... 7, 505
Colloidal chemical sizing studies.... 7, 515
Colloidal properties of spruce wood..... 3, 203
Color analysis and specification
Part I.... 3, 171
Part II....6, 407
Color as light....12, 858
Color charts, industrial uses of.... 3, 170
Color in use....12, 858
Coloring of cellulose fibers....12, 859
Coloring of paper.... 6, 431
Combustion control equipment....11, 771
Combustion efficiency 11, 785
Commutators, care of.... 5, 347
Consider maintenance cost in selecting grates.. 8, 577
Constitution of cellulose....11, 791
Construction problems associated with high pressure boilers for the pulp and paper industry 12, 858
Consumption of paper rising above last year's showing 6, 420
Continuous bleaching of fibers.... 9, 651
Controlled production 4, 271
Conway, J. M., Top sergeant methods in business are antiquated 3, 169
Cook, O. L., Limestone and lime.... 4, 248
Cooking of kraft pulp with improperly settled with improperly selected white liquor.....12, 860
Cooper, A .M., and F. W. Parsons, Power losses reduced through sectional drive....10, 694
Corn, Ernest W., Accident prevention and the new industrial economy.... 7, 499
Corn starch 4, 254
Corrosion of idle boilers....10, 713
Correlation of research with mill operation.... 4, 270
Cranich, Dr. A. G., Trend of occupational diseases and compensation in the paper industry 7, 505
Current Thought:
An offensive is the best defensive..... 7, 458
"Between the dark and the daylight".... 6, 382
Is Machinery to blame?.... 1, 12
Making archaeology easy....12, 816
Next Winter 4, 228
Panacea 11, 745
Retrospection and introspection....10, 676
That vacation 3, 158
The job ahead for machinery..... 2, 86
Thirty hours a week.... 9, 612
We may expect increasing trouble..... 5, 314
Words 8, 542
Cylinder machine wet-end electric drive..... 8, 570
Cyr, Howard M., Zinc sulphide pigments..... 4, 257

D

Davis, D. S., Calculating the length of paper in a roll 1, 29
Paper winding nomographs....10, 688
Davis, M. N., and L. J. Lewis, Definition and instrumentation regarding brightness.....12, 859
D. K. Dean (See G. M. Cameron)
De Cew, J. A., Adverse function of gases in the manufacture of paper....12, 861
Special types of rosin size and their physical properties 12, 855
Definition and instrumentation regarding brightness 12, 859

Degree of acidity in paper..... 5, 357
Degree of pulping..... 5, 353
Democratization of capitalism..... 1, 25
Dependance of reflectance and opacity on thickness; relation between contrast ratio and printing opacity 12, 859
Design and application of phenolic composition bearings 6, 410
Design and use of clutches in the paper industry 8, 562
Determination of active chlorine in bleach liquors 1, 59
Determination of bound rosin in pulps..8, 589; 9, 649
Determination of fuel losses..... 1, 33
Determination of rigidity, stiffness and softness of paper, the.....12, 854
Device used in bag manufacture..... 3, 201
Digester linings 3, 199
Disintegrating and pulp purification equipment 4, 289
Distribution of sulphur in the kraft cooking operations, the.....12, 860
Dodge, W. G., and C. E. Tarvin. The testing of news print for smoothness, ink penetration and opacity.....12, 854
Drainage control and the fourdrinier..... 5 355
Drewsen, Pierre, Paperboard requirements of the converter 7, 478
Size testing of board..... 1, 31
Dryer for heavy cardboard..... 6, 429
Dryers in paper and board machines.....10, 717
Drying and cleaning dryer felt..... 7, 515
Drying of pulp and paper..... 6, 433
Dun and Bradstreet report paper industry improved 1, 49
Duo de-hydration press part for cylinder machines, the 4, 268

E

Earle, Chester Reed, Shall industrials and utilities interchange electric power?..... 8, 553
Economies in storeroom stocks.....12, 877
Economizers 5, 347
Editorials:
A Century of Progress in 1934..... 3, 156
A question of service..... 8, 540
A word of appreciation..... 6, 380
Achievement records 9, 610
Business is getting better..... 2, 83
Congratulations, Pacific Coast T.A.P.P.I.. 7, 456
Convention week soon.....10, 674
Dividends in safety.....10, 674
Go to work..... 7, 455
If you want to get ahead..... 2, 84
Industrial situation demands higher paper prices 11, 741
Keeping posted 12, 814
Keeping up with the Joneses.....10, 673
Leaders of tomorrow..... 3, 156
Let's have the facts..... 5, 311
Maintain the status quo..... 1, 9
Members and friends of T.A.P.P.I..... 5, 312
Merchandising the industry.....11, 742
Museum of Science and Industry..... 6, 380
National industrial recovery.....12, 813
Need for new equipment..... 7, 456
On the other side of the desk..... 5, 312
Once each year.....10, 674
Paper mills thirst for good water..... 2, 84
Paper prices maintained..... 6, 379
Put your plant in shape now for next winter 1, 10
Share your thanksgiving..... 8, 540
Superintendents go to Maine..... 1, 10
The Closed Purse..... 4, 226
The codes must be properly administered. 4, 225
"The Government can't do it alone"..... 9, 609
The silver lining..... 1, 10
The Superintendents association..... 4, 226
The will to succeed will grow and breed....3, 155
What was your answer?..... 9, 610
Work for prosperity . . . and you'll win.. 8, 539
Why do we keep Christmas?..... 9, 610
Edwin Sutermeister awarded T.A.P.P.I. medal..12, 849
Effect of fiber length on groundwood..... 8, 589
Effect of temperature on the beating of rag stock 12, 861
Effects of refining action.....12, 861
Efficiency in small plants.....12, 877
Electric drive for cylinder machine wet end..12, 856
Electrical drives for calender rolls.....12, 883
Electrical drives in paper mills..... 4, 287
Electrical tachometer 6, 429
Elledge, Harvey G., Soda ash and caustic soda.. 4, 252
Ellis, Charles L., Duo de-hydration press part for cylinder machines..... 4, 268
Entrained air in oil.....10, 713
Evaluation of the heat input into alkaline pulping digesters 12, 860
Evaluation of printing qualities of paper.....12, 854
Extension of high speed grinding studies.....11, 783

F

Factors involved in the accuracy of fiber analysis 12, 854
Factors governing heat transfer in paper drying.12, 854
Fibers under the flourescence microscope..... 2, 129
Fibre structure and its influence in papermaking..11, 769
Filling sulphite digesters..... 7, 515
Fireproof fibrous materials..... 9, 651
Fitzgerald, A. H., A close-up of some salesmen as seen by a paper mill purchasing agent... 2, 101
Flax chaff and straw in paper..... 7, 515
Fredriksson, John F., Paper makers alum..... 4, 244
Fuel losses, determination of..... 1, 33
Fundamental aspects of power consumption in grinding 11, 768
Fundamentals of paper mill lighting..... 1, 38
Fundamentals of the Bewold process.....12, 855
Furfural number in pulps..... 2, 131
Future outlook based on experience.....11, 764

G

Gasket pointers, a few..... 1, 41
Garrigan, Frank, Wood room operation..... 4, 267
Gauge checks scale accumulation..... 9, 645
Generators, inspection of..... 2, 122
Georgi, E. A., Our present knowledge of rosin..12, 855
German standards in pulp testing..... 2, 129
Gessler, A. E., Chemistry of color.....12, 858
Gilbert, Lavern A., and H. F. Lewis, Effect of temperature on the beating of rag stock....12, 861
Gildenzopf, E. C., Proper co-operation and paper mill supervision 4, 268
Gill, Lowell, and Paul Torre, Corn starch..... 4, 254
Goebel slitter and rewinder.....11, 787
Gough, J. B., Design problems of paper machine wet end 11, 767
Government printing office paper tests and their significance 4, 265
Graef, O. K., Bearing fundamentals.....12, 835
Chest outlets and overflows..... 3, 177
Design and application of phenolic composition bearings 6, 410
Steam leak calculations.....11, 769
Graff, John H., Factors involved in the accuracy of fiber analysis, the.....12, 854
New stains for fibre evaluation and identification 4, 270
New stains and their use for fiber identification 12, 854
Green, Arthur B., Admission of stock to the fourdrinier wire.....12, 856
Beating from standpoints of control and design 12, 861
Management and men..... 5, 340
Groundwood 10, 717
pulp for high speed newsprint..... 4, 268
non-uniformity of 10, 709
Guenther, E. B., Refractories in the chemical pulp industry 6, 404
Gulliksen, F., Photo-electric control of bag machines 8, 568
Gumming paper, use requirements of.....11, 760

H

Hadaway, W. S., Fundamentals of paper mill lighting 1, 38
Haganauer, J. O., Labor cost of production in the paper and pulp industry.....12, 850
Halfstuff from Ukranian straw..... 4, 289
Handling of ash in coal is costly..... 8, 577
Hardwood pulps, specific characteristics of.... 2, 105
Hardy, A. C., Color as light.....12, 858
Harrar, Ellwood S., and J. Elton Lodewick, Identification and microscopy of wood fibers used in the manufacture of pulp
Part II—(Hardwoods) 2, 103
Part III—(Non-porous) 5, 327
Harrison, Ward D., and Otto Kress, The cooking of kraft pulp with improperly settled white liquor 12, 860
Hatch, R. S., Technical control in the manufacture of sulphite pulp.....11, 758
Heat and power production and transmission..12, 859
Heat requirements of the sulphate process....12, 860
Heilig, William, Valves for the pulp and paper mill power plant..... 8, 558
Heimrod, A. A., B. D. Millidge and E. Taylor, Recovery of soda from spent liquor..... 4, 266
Henderson, C. T., The art of bleaching in theory and in practice.....4, 266, 267
Henry, F. R., Knife grinding is an exacting job. 9, 634
Heritage, Clark C., Correlation of research with mill operation 4, 270
Herty, Dr. Charles H., Newsprint from Southern pine 4, 264
Hesser, S. M., The paper mill superintendent.. 4, 268
Hinckley, W. T., Recent trends in black liquor evaporator designs and their use in multiple effect combinations 12, 860
Holes in baffle walls..... 6, 425
Holt, Fred Jr., Use requirements of gumming paper 11, 760
Hooker, A. H., Chlorine—gas and liquid..... 4, 246
Hoover, Dr. G. I., Use of white water in the fine paper industry 11, 767
Hunter, R. S., Reflection measurements on pulp and paper 12, 859
Hydraulic operating device..... 6, 431
turbines, inspection of..... 7, 507
Hyer, Allan, The Black-Clawson vat..... 4, 268

I

I-Beams in the paper mill.....12, 841
Identification and microscopy of woods and wood fibers used in the manufacture of pulp
Part II—(Hardwoods) 2, 103
Part III—(Non-porous) 5, 327
Impermeable cellulose product..... 1, 57
Impregnation of paper with viscose..... 5, 353
Improvement in paper machine..... 2, 131
Individual vs. group drainage of paper machine dryers 3, 184
Industrial lubrication and lubricants..... 8, 565
Industrial plants can be made beautiful..... 1, 42
Industry and accidents in 1934.....10, 705
Influence of the head box and slice on sheet formation, the 12, 856
Injectors, repairing and cleaning..... 6, 425
Ink components and penetration..... 2, 131
Inspection of superheaters important..... 9, 645
Insurance engineer reviews paper mill fire hazards 1, 34
Introducing dyes into beater..... 8, 589
Iodo-Colorimetric method for cellulose..... 6, 429

J

Japanese pulpwoods 5, 355
Johnston, H. W., and O. Maass, Fundamental aspects of power consumption in grinding..11, 768
Judd, D. B., Dependence reflectance and opacity on thickness; relation between contrast ratio and printing opacity.....12, 859
Method for determining the whiteness of paper 12, 859

K

Kama river pulp and paper mill..... 8, 589
Kantrowitz, Morris S., Government printing office paper tests and their significance..... 4, 264
Kidder, W. K., Technical control in book paper mills 7, 475
Knife grinding is an exacting job..... 9, 634
Knoll, William V., Cause and effect of improper drying on paper machines..... 2, 112
Kollergang beating method for pulp evaluation, the 12, 851
Kraft cooking operations, the distribution of sulphur in 12, 860
Kraft pulp with improperly settled white liquor.12, 860
Kress, Otto, (See also B. L. Browning)
(see also Ward D. Harrison)
and Edwin R. Laughin, A study of the factors influencing the brightness of paper as recorded by the General Electric reflection meter 12, 859
and J. W. McIntyre, The distribution of sulphur in the kraft cooking operations.....12, 860
Krimmel, M. A., Losses in size making and observations in the cooking of rosin.....12, 855
Kunkel, Fred E., A simple purchasing system.. 7, 509
KVP, a happy paper mill community.....12, 846

L

Labor cost of production in the paper and pulp industry 12, 850
Laminated cellulose pads..... 3, 203
LaQue, F. L., and N. B. Pilling, and F. G. Wheeler, Some factors influencing the life of fourdrinier wires.....12, 854
Latex in paper and board..... 1, 59
Laughin, Edwin R. (See Otto Kress)
Leaf, R. K., Measurement of sulphate production by the use of flow meters..... 4, 267
Length of paper in a roll, method of calculating 1, 29
Let's teach safety's teachers..... 7, 500
Lewis, H. F. (See LaVern A. Gilbert)
Lewis, L. C., Standard brightness testers..... 4, 270
Lewis, L. J. (See M. N. Davis)
Lignin in Douglas fir..... 7, 480
Limestone and lime..... 4, 248
Load regulation in pulp grinders..... 6, 431
Load variation and power station efficiency.... 1, 45
Lodewick, J. Elton. (See Ellwood S. Harrar).
Look toward the future, a.....10, 687
Looker, C. D., Sodium chloride..... 4, 253
Loss of heat in sheet formation..... 8, 587

Losses in size making and observations in the cooking of rosin....12, 855
Lubrication of motor bearings.... 8, 577

Mc

McAdam, H. B., and L. C. Anderson, Extension of high speed grinding studies....11, 768
McGregor, George H., and C. W. Morden, The Stock-maker Precision Laboratory Beater....12, 851

M

Maag, O. L., Industrial lubrication and lubricants 8, 565
Maass, O. (See H. W. Johnston)
MacArthur, A. S., and R. A. Stough, Democratization of capitalism.... 1, 25
Maintenance, calibration and use of paper testing instruments 9, 621
costs should be segregated....11, 785
Man on the machine looks at training, a.... 5, 340
Management and men.... 5, 341
must lead the way in safety....11, 757
Manager and man under the New Deal.... 4, 269
Manchurian pulps used for viscose....12, 883
Manning, W. T., Practical limits in the use of high pressure and temperature in turbines 1,000 kw. to 10,000 kw. rating....12, 858
Marshall, A. E. Sulphur.... 4, 255
Masters, H. R., Individual vs. group draining of paper machine dryers.... 3, 184
Measurement of sulphite production by the use of flow meters.... 4, 267
of whiteness in paper.... 9, 651
Mechanical pulp 9, 651
Metallized paper 10, 717
Meters cut steam costs.... 1, 45
Method for determining the whiteness of paper..12, 859
Milham, E. G., Coating brushes, their care and maintenance 9, 627
Mill test for the exact determination of combined sulphur dioxide....12, 853
Millidge, B. D. (See A. A. Helmrod)
Minor, Jessie E. (See Charles A. Blaisdell)
Modification in viscosimeters.... 4, 289
Moisture stock density and ash in pulp.... 9, 647
Moistureproof paper 1, 55
Morden, C. W. (See George H. McGregor)
Moorehouse, Russell, The use of adhesives for laminating operations 12, 856
Morgan, O. V., Industrial plants can be made beautiful 1, 42
Motion photomicrographs of fiber swelling.... 3, 201
Motorized wet-end drive.... 4, 258
Murdock, Harold R., Evaluation of the heat input into alkaline pulping digesters....12, 860
Natural cellulose fiber and its hydration, the..12, 842
Neitzke, O. F., Physico-chemical principles of the Bennett process....12, 855
New developments in lignin removal studies....11, 769
pulping method for spruce....10, 717
stains and their use for fibre identification.12, 854
stains for fibre evaluation and identification 4, 270
Newsprint from Southern pine.... 4, 265
Noyes, H. G., Apprenticeship in the paper industry and the NRA....12, 851
NRA and its effects on labor relations in the paper industry 12, 852
Numerical measure of degree of sizing.... 9, 647

O

Oilproof insulating material.... 2, 133
Operating practice in switching and power distribution in paper mills....12, 858
Optical characteristics of paper....12, 858
studies on pulps....10, 715; 12, 881
Ormsbee, G. D. J., Beater control....12, 861
Our present knowledge of rosin....12, 855
Oxidized cellulose 4, 289

P

Painting in the power plant....11, 785
Palmrose, G. V., A mill test for the exact determination of combined sulphur dioxide..12, 853
Paper and paperboard production by kind, 1933 and 1931 ....10, 699
and pulp mill management in the Pacific Northwest under the NRA....12, 852
consumption by kinds and per capita....11, 763
drying, factors governing heat transfer in..12, 854
expectancy for 1935....11, 762
industry in best position since 1930....11, 770
industry standardization of product and its relationship to the superintendents.... 4, 260
lithographic—condition of 11, 759
machine press rolls.... 4, 269
machine regulator, automatic.... 1, 55
machine water 12, 856
machine wet end, design problems of....11, 767
makers alum 4, 244
mill fire hazards, reviewed by an insurance engineer 1, 34
mill lighting, fundamentals of.... 1, 38
mill superintendent, the.... 4, 268
stock treatment, mixing and beating with rods 12, 861
testing instruments, maintenance, calibration and use of.... 9, 621
winding nomographs 10, 688
Paperboard requirements of the converter.... 7, 478
Paper Industry Contest, The (See Safety Contest)
Papermaking chemical raw materials.... 4, 243
Parant, L. J., Management must lead the way in safety 11, 757
Parchmentizing coating, or gluing device.... 3, 203
Parks, J. O., A man on the machine looks at training 5, 340
Vertical adjustment of fourdrinier part.... 2, 102
Parsons, F. W. (See A. M. Cooper)
Pattison, R. W. and L. M. Yoerg, Paper machine press rolls.... 4, 269
Paulson, P. A., Acid pulping developments....12, 852
Pef, N. T., Superheated steam in the paper industry 4, 263
Perforated tubes, avoid for sampling.... 5, 347
Peterson, C. E., Testing of non-fibrous raw materials 12, 855
Peterson, G. A., Electric drive for cylinder machine wet-end 12, 856
pH in volumetric analysis.... 3, 201
Phenolic composition bearings, design and application of 6, 410
Photo-electric control of bag machines.... 8, 568
Photographic basepaper production, technology of 5, 336
Physico-chemical principles of the Bennett process 12, 855
Pickard, W. W., A look toward the future....10, 687
Pilling, N. B. (See F. L. LaQue)
Polakov, W. N., Chart for executive control during time of shifting economy....12, 850
Porous pulpwoods, key to.... 2, 111
Possibilities of improving pulping characteristics of pulpwoods by controlled hybridization....12, 860
Power, interchange of.... 8, 553
losses reduced through sectional drive....10, 694
Power department:
1, 45; 2, 122; 3, 196; 4, 279; 5, 347; 6, 425; 7, 507; 8, 577; 9, 645; 10, 713; 11, 785; 12, 877
Practical limits for steam pressure and temperature in paper mill power plant service..12, 858
limits in the use of high pressure and temperature in turbines 1,000 kw. to 10,000 kw. rating 12, 858
Precise measurement of air permeability....10, 693
Preventing steam leakage into idle turbines.... 6, 425
Prevention of fire in pulpwood storage.... 1, 37
Pringle, Geo. H., Design and use of clutches in the paper industry.... 8, 562
Procedure for investigating the relation of freeness and fiber size to the hydration of stuffs..12, 861
Production of paper and paperboard by kind..10, 699
Production planning 5, 323
Proper co-operation and paper mill supervision.. 4, 268
Properties of regenerated waste paper.... 3, 201
Pulp from peat.... 6, 429
digester 4, 285
for highly absorptive paper.... 5, 355
refiner 5, 357
testing in Russia.... 2, 133
Pulps from annual plants.... 8, 589
Putting safety engineers under the microscope.. 7, 505

R

Randall, H. T., Safety exchange.... 7, 504
Razek, Joseph, Color analysis and specification Part I 3, 171
Part II 6, 407
Razek-Mulder Color Analyzer.... 3, 172
Recent trends in black liquor evaporator designs and their use in multiple effect combinations.12, 860
Record system, does yours fulfill your needs?...10, 713
Recovery of soda from spent liquor.... 4, 267
of solvents from moving paper sheets.... 7, 517
Refining engine 4, 285
Reflection measurements on pulp and paper....12, 859
Refractories in the chemical pulp industry.... 6, 404
Relation of fiber formation and hygrometric condition of paper to register in offset printing..12, 854
of white water pH to that of finished paper 6, 401
Relationship of stuff preparation theories to practice 12, 861
Relining of boiler furnaces.... 9, 645
Removing oil from water.... 8, 587
water from pulp.... 1, 59
Repair stacks in the summer time.... 4, 279
Repairing air leaks in a boiler setting.... 8, 577
patented paper machinery....11, 761
Requirements of materials for weaving fourdrinier wires 12, 854
Ritter, George J., Structure of the cell wall of wood fibers 3, 178
Rod mill 11, 789
Roe number in estimating mechanical pulp....11, 791
Rose, R. E., and J. Carl Schmidt, Coloring of cellulose fibers, the....12, 859
Rosencranz, F. H., Construction problems associated with high pressure boilers for the pulp and paper industry....12, 858
Rosin and fats in pulps.... 7, 515
and rosin size.... 4, 249
size, physical properties of special types..12, 855

S

Safety Contest: The Paper Industry (Scores)
1, 53; 2, 125; 3, 197; 4, 281; 5, 349; 6, 427; 7, 511; 8, 579; 9, 643; 10, 711; 11, 783; 12, 875
Salt cake 4, 250
Schaphorst, W. F., Determination of fuel losses 1, 33
I-Beams in the paper mill....12, 841
Repairing patented paper machinery....11, 761
Suggestions for modernizing the paper mill power plant 8, 561
Schmidt, J. Carl. (See R. E. Rose)
Schreiner, Ernst J., Posibilities of improving pulping characteristics of pulpwoods by controlled hybridization 12, 860
Schwalbe, Carl G., Dr., retires.... 3, 189
Sensitizing valuable papers.... 2, 133
Simmonds, F. A. (See P. K. Baird)
Shaking devices and their placement.... 8, 585
Shall industrials and utilities interchange electric power? 8, 553
Sheet dryers for binder's and fiber board.... 9, 630
Sibley, William. (See Current Thought)
Silicate of soda.... 4, 251
Simple purchasing system, a.... 7, 509
Simplified instrument for examining surfaces..10, 719
Simpson, A. W., Groundwood pulp for high speed newsprint 4, 268
Size testing of board.... 1, 31
Slitter and rewinder.... 9, 651
Smith, Arthur C., Controlled production.... 4, 271
Smith, R. H., A cylinder machine wet-end electric drive 8, 570
Smith, Vincent S., What happens when ink meets paper? 9, 626
Soda ash and caustic soda.... 4, 252
Sodium chloride 4, 253
Sodium displaces lime in cooking acids.... 3, 203
Solutions of basic salts of aluminum....12, 855
Some economic considerations in the selection of paper mill drives.... 4, 270
Some factors influencing the life of fourdrinier wires 12, 854
Special types of rosin size and their physical properties 12, 855
Specific gravity of pulpwoods.... 2, 133
Stamm, F. C., Factors governing heat transfer in paper drying....12, 854
Standard brightness testers.... 4, 270
Standardization of alcoholic extraction of pulp..12, 883
Standardizing alpha cellulose determination....12, 881
Starch 4, 254
from waste sweet potatoes.... 9, 629
Static electricity in paper....12, 845
Steam accumulators in paper mills....12, 858
leak calculations 11, 769
used for sulphite pulping....12, 853
Steele, F. A., The optical characteristics of paper 12, 858
Sterns, R. W., Use of white water in the newsprint mill 11, 767
Stevens, R. H., Rosin and rosin size.... 4, 249
Stock-maker precision laboratory beater, the..12, 851
Stough, R. A. (See A. S. MacArthur)
Structure of the cell wall of wood fibers.... 3, 178
Studies on the alkaline pulping processes.... 6, 413
Study of some factors influencing the formation and dissociation of sulphur trioxide in sulphur burner gases for sulphite pulping....12, 853
Study of the factors influencing the brightness of paper as recorded by the General Electric reflection meter....12, 859
Stuffing box device.... 5, 357
Suarez, F. M., Silicate of soda.... 4, 251
Suggestions for modernizing the paper mill power plant 8, 561
Sulphate cook, high temperatures in.... 1, 57
process, heat requirements of....12, 860
Sulphite cooking liquor.... 4, 239
pulp, technical control in the manufacture of 11, 758
pulping changes in spruce....11, 791
Sulphur 4, 255
consumption in the sulphite cook.... 1, 59

Superheated steam in the paper industry..... 4, 263
Surface application of titanium pigments.....12, 851
esterification in paper..... 7, 515
Sutermeister, Edwin, Casein..... 4, 245
Bibliography of 12, 849
Sutherland, D. Manson, Effects of refining action.12, 861
Swelling of spruce wood in various liquids....12, 881

T

Tachometers in the power plant..... 7, 507
Tarvin, C. E. (See W. G. Dodge)
Taylor, E. (See A. A. Heimrod)
Technical control in book paper mills..... 7, 475
control in the manufacture of sulphite pulp 11, 758
control . . . what is it and does it pay?.. 3, 173
Technical developments in the paper industry: 1, 55; 2, 129; 3, 199; 4, 285; 5, 353; 6, 429; 7, 513; 8, 585; 9, 647; 10, 715; 11, 787; 12, 879
Technology of photographic basepaper production 5, 336
Temperature control in pulp grinders..... 2, 133
Temperatures on the paper machine..... 8, 589
Testing and classification of coated paper.....12, 851
greaseproof papers 7, 513
of news print for smoothness, ink penetration and opacity.....12, 854
of non-fibrous raw materials.....12, 855
Tests for casein and animal size..... 5, 355
Thioglycolic acid as a new lignin reagent.....11, 787
Thomas, A. W., Solutions of basic salts of aluminum 12, 855
Thomas, B. M. (See H. P. Cannon)
Tight dampers important when banking.....10, 713
Tight folding carton packing boxes..... 8, 587
Tissue selling observations..... 7, 498
Titanium pigments 4, 256
Top sergeant methods in business are antiquated 3, 169
Torre, Paul. (See Lowell Gill)
Trend of occupational diseases and compensation in the paper industry..... 7, 505
Trophy winners in The Paper Industry Safety Contest 7, 503
Turner, J. H., Safety methods..... 7, 501

U

Universal standardization of pulp tests..... 6, 429
Use of adhesives for laminating operations....12, 856
of gaskets 9, 645
of titanium pigments in paper..... 6, 433
requirements of gumming paper.....11, 760

V

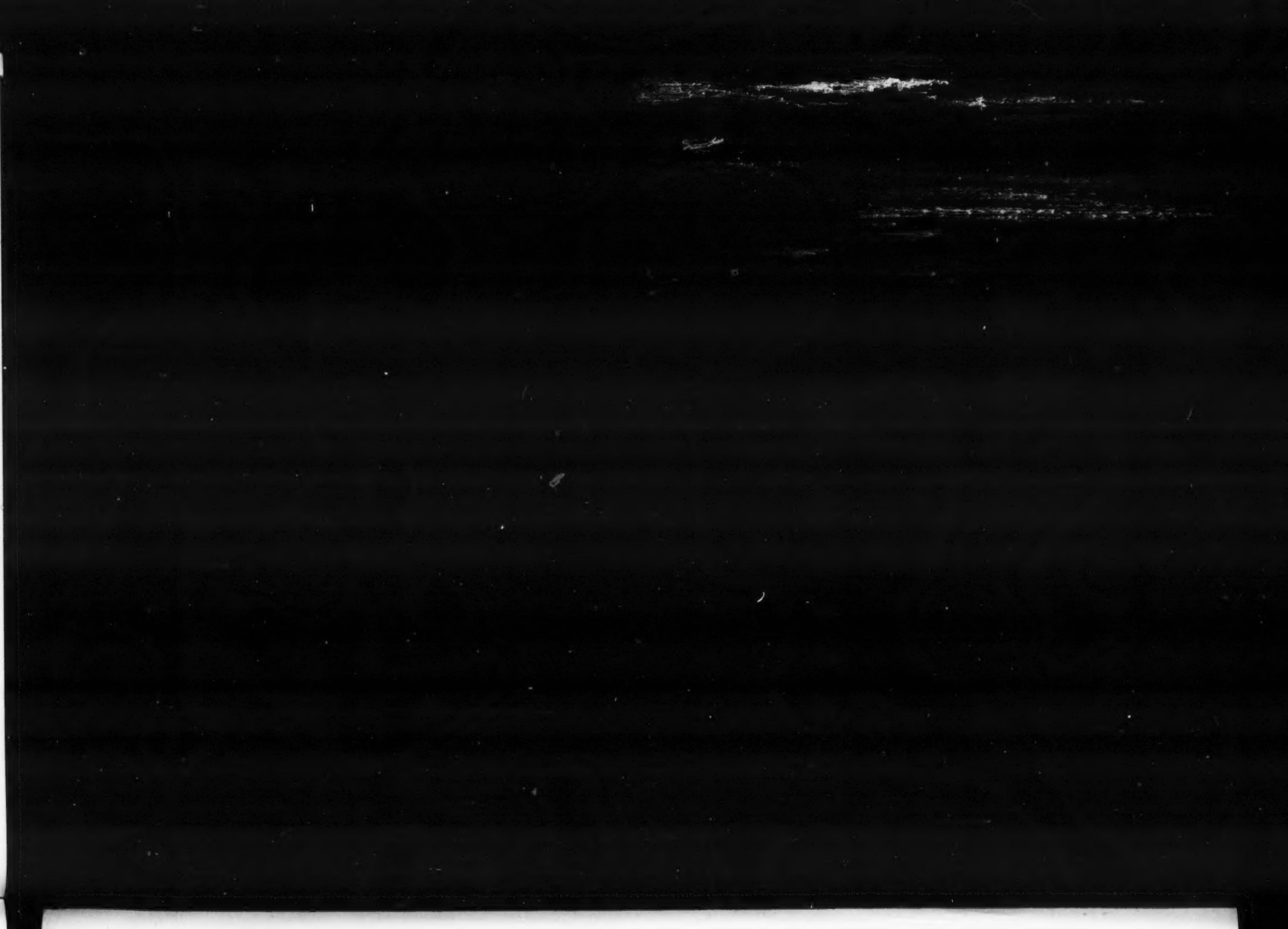
Valves for the pulp and paper mill power plant 8, 558
Various sizing agents..... 5, 357
Vertical adjustment of fourdrinier part..... 3, 102
Vicario, Carlo, The application of vacuum pumps to paper machines..... 4, 261
Voit, Robert, Washable Wall Paper.....12, 851

W

Wagner, W. P., Building company spirit for company success 10, 690
Washable wall paper.....12, 851
Waterproofness of paper..... 3, 199
Weber, C. G., Relation of fiber formation and hygrometric condition of paper to register in offset printing 12, 854
Webster, W. T., Heat requirements of the sulphate process 12, 860
Wehmhoff, B. L., Evaluation of printing qualities of paper.....12, 854
Weil, Curt, Sheet dryers for binder's and fiber board 9, 630
The natural cellulose fiber and its hydration 12, 842
Wells, Sidney D., Paper stock treatment, mixing and beating with rods.....12, 861
Welp, George, Color in use.....12, 858
Wet felts 11, 789
What happens when ink meets paper?..... 9, 626
What I do not know about sizing and capillary flow 12, 855
What is technical control, and does it pay?.. 3, 173
Wheat straw pulp by chlorination.....11, 789
Wheeler, F. G., Some factors influencing the life of fourdrinier wires.....12, 854
Wheelwright, William Bond, Paper expectancy for 1935 .....11, 762
When negative brushes stick..... 5, 347
White, Edward J., Tissue selling observations.. 7, 498
White water, its use in the fine paper industry..11, 767
its use in the newsprint mill.....11, 767
pH, relation to that of finished paper.... 6, 401
Wieger, Bruno, Physico-chemical principles of the Bennett process.....12, 855
Wilkinson, Adam, The NRA and its effect on labor relations in the paper industry.....12, 852
Willets, Wm. R., Surface application of titanium pigments 12, 851
Titanium pigments 4, 256
Williams, Whiting, Manager and man under the New Deal 4, 269
Williamson, Harry, Relationship of stuff preparation theories to practice.....12, 861
Willson, S. L., Future outlook based on experience 11, 764
Wilson, I. V., Salt Cake..... 4, 250
Wilmer, F. P., Heat and power production and transmission 12, 859
Witham, G. S., Jr. (See F. W. Adams)
Wise, Louis E., Professor Dr. Carl G. Schwalbe retires 3, 189
Wolf, R. B., Paper and pulp mill management in the Pacific northwest under the NRA....12, 852
Wood fibers, structure of cell wall of..... 3, 178
properties of, and sulphite production.... 1, 57
pulp for cellulose acetate..... 3, 201
pulps, acetylation of..... 1, 57
room operation 4, 267
Woods and wood fibers, identification and microscopy of for manufacture of pulp
Part II—Hardwoods..... 2, 103
Part III—Non-porous 5, 327
World-wide advances in pulp and paper testing 5, 357

Y

Yankee machine, the..... 8, 566
Yoerg, L. M. (See R. W. Pattison)
Yorston, F. H., New developments in lignin removal studies 11, 769

Z

Zinc sulphide pigments..... 4, 257